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New opportunity to reduce your community's flood insurance premiums

The National Flood Insurance Program (NFIP) is working to reduce flood insurance premiums in communities that demonstrate exceptional floodplain management efforts. The Community Rating System (CRS), introduced last year, is intended to reward communities that initiate flood damage reduction activities beyond the minimum regulatory requirements of the NFIP.

The CRS is an attempt to make flood insurance ratings more accurate in much the same way that communities are rated for fire insurance. Premiums are discounted to reflect the community's level of investment in other protective measures, such as floodproofing existing buildings. By encouraging better floodplain management, the NFIP and the Federal Emergency Management Agency (FEMA) hope to reduce flood losses and promote a greater awareness of the advantages of flood insurance.

According to preliminary guidelines from FEMA, a community must meet four criteria to be eligible for lower premiums.

1. The community must be in good standing with the NFIP, having had a successful Community Assessment Visit within the past 12 months.
2. The community must maintain FEMA elevation certificates for all new buildings constructed in the floodplain.
3. If the community is identified by FEMA as a repetitive-loss community, it must develop and implement a mitigation plan for reducing those losses. (Currently there are no repetitive-loss communities in Montana.)
4. When applying for the CRS, the community must submit evidence that it is implementing "creditable activities" to reduce flood damages.

These creditable activities are being outlined by FEMA. The following list is incomplete, but will be revised and updated by FEMA in the near future. Creditable activities include:

- keeping files of elevation certificates
- enacting floodplain regulations that exceed minimum NFIP requirements

- requiring floodproofing for existing buildings
- requiring the disclosure of flood hazard with the sale of flood-prone property
- holding public information programs to increase flood-hazard awareness
- mapping areas to improve the accuracy of FEMA maps or to cover areas not mapped by FEMA
- developing flood preparedness, warning, and emergency response plans

Montana communities should fare well under this program. Current state law requires more stringent floodproofing than the minimum NFIP requirements. But to be eligible for the CRS, it is essential that local officials keep accurate and complete records for the community's floodplain management program.

A FEMA slide show is available for communities in the NFIP. Contact the DNRC Floodplain Management Section at 444-6646 if you are interested in a local presentation.

PLEASE RETURN

Stream crossings and the floodplain development permit

New bridges and culverts are some of the most common types of structures that require a floodplain development permit. Either type of crossing can constrict the stream channel and cause an increase in flood stages. In rural areas where no development exists, bridges or culverts may not create any new difficulties. But in developed areas, existing buildings may experience increased flooding problems. The development permit process ensures that new bridges and culverts in the floodplain will not worsen potential flood conditions.

The Floodplain and Floodway Management Act (Title 76, Chapter 5, MCA) limits the allowable increase in flood stage generated by a new stream crossing to one-half foot or less during a 100-year flood. A permit applicant must provide enough information to the floodplain administrator to ascertain that this standard will be met. As part of the application, the developer must provide a hydraulic analysis of the impacts a proposed stream crossing will create. The design must be based on discharge (flow) rates published in the flood insurance study or in publications of the U.S. Geological Survey, the Soil Conservation Service, or U.S. Army Corps

of Engineers. If no discharge rate has been published, then a flow for a 100-year flood must be estimated.

The hydraulic design for a new stream crossing must be performed by a qualified, registered professional engineer. This design is often based on information from floodplain delineation studies, which is generated by a computer model of stream hydraulics. The computer model calculates a profile of the water surface by analyzing cross-sectional measurements of the entire floodplain, roughness factors that describe the amount of resistance to flow, and the quantity of water.

The information provided by stream-hydraulics modeling is vital to performing the hydraulic design. Modeling data and results for specific stream reaches can be requested through:

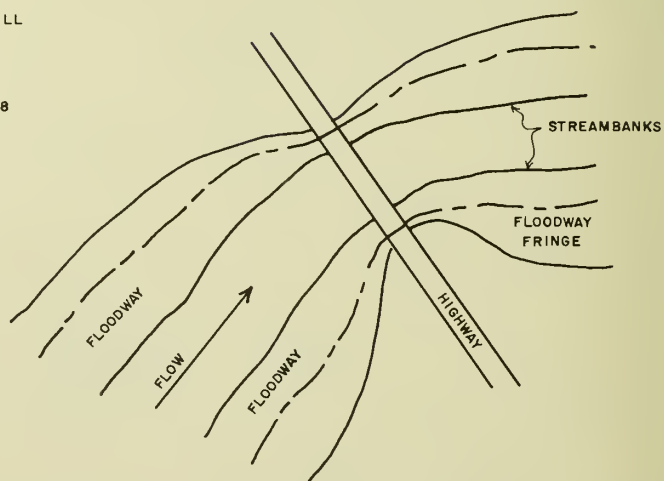
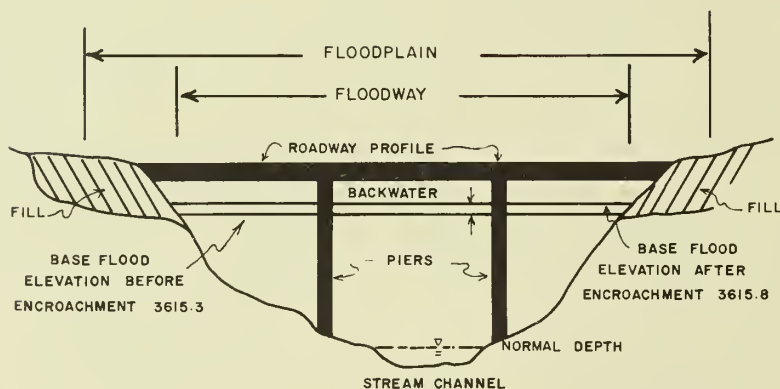
John Liou
Federal Emergency Management
Agency, Region VIII
Natural Hazards Division
Denver Federal Center, Building 710
Box 25267
Denver, CO 80225-0267

Once a floodway has been analyzed through computer modeling, it is common to find that standard bridge approaches

would encroach upon the floodway, causing backwater to exceed the one-half foot allowable increase in flood heights during 100-year floods. It may be necessary to include piers within the floodway so that the bridge spans the entire floodway. The bridge piers must then be accounted for in the hydraulic analysis and design.

The permit application must include enough detail to ensure that the requirements of the local floodplain management ordinance are met. At the very least, the application must include a plan view showing the location of the crossing; an elevation view showing the bridge abutments, piers, channel cross section, roadway profile and water surface elevation before the encroachment and after construction; and a hydraulic analysis. A complete review cannot be made without this information.

Well-designed bridges and culverts that meet the requirements of the Floodplain and Floodway Act are more likely to serve their purpose without causing undesirable changes in the floodway. For more information on the act or about administering permits for stream-crossing structures, contact DNRC's Floodplain Management Section at 444-6646.



An update on the dam safety program

The Montana Legislature passed the Dam Safety Act in 1985 after the U.S. Army Corps of Engineers (Corps) examined 3,500 dams in Montana in 1980 and found that 118 of them were "high hazard". Thirty-five of the 118 high-hazard dams did not meet Corps safety standards and were considered "unsafe". Most of these were considered unsafe by the Corps because their spillways were inadequate to accommodate foreseeable floods. In flood conditions, inadequate spillways can lead to dam failure.

The purpose of the Dam Safety Program, created by the act, is to ensure the safe construction and operation of high-hazard dams. The term "high hazard" pertains to dams that impound at least 50 acre-feet of water, and to situations where sudden failure of the dam could lead to loss of human life.

The legislature exempted the 118 existing high-hazard dams from the requirements of Montana's Dam Safety Act until July 1, 1990. After that date, owners of these dams must obtain a construction permit from DNRC before they can perform major repair, alteration, enlargement, or removal of the dams. By July 1, 1995, these dam owners must obtain a permit from DNRC

to operate the dams. For high-hazard dams not inspected by the Corps, an operation permit must be obtained by October 1, 1990. In granting an operation permit, DNRC certifies that maintenance and operation procedures are adequate for the dam and appurtenant works, and that the operator has formulated adequate emergency procedures and warning plans. Unless negligence can be proved, owners of dams with construction or operating permits from DNRC are not liable for any damage caused by flows from the dam that exceed the 100-year flood.

DNRC responds to complaints about unsafe dams that impound 50 acre-feet or more. Upon receipt of a complaint, the department investigates the situation and, if necessary, orders safe operation or construction.

DNRC is also responsible for the hazard classification of existing and proposed dams. The Dam Safety Act specifies that no major construction may occur on an existing or proposed dam until DNRC has analyzed the downstream hazard potential of the structure. Owners or developers of existing or planned dams should apply to DNRC for hazard classification. The law also specifies that anyone intending to build

a high-hazard dam must obtain a construction permit from DNRC. The department then acts under the Dam Safety Program to review the engineering designs, construction plans, and specifications of the high-hazard dams.

To date, DNRC has performed 58 hazard classifications. Ten of the dams evaluated were determined to be high-hazard. Of these 10 dams, 5 were existing dams awaiting major repair, and the other 5 were proposed new dams.

If there is an emergency situation at a dam and the dam owner fails to take adequate action, DNRC can act to avert damage or loss of life. Such action may include hiring a contractor to breach the structure or install fill, or initiating and assisting evacuation.

The Dam Safety Program also emphasizes education through dam safety workshops presented by DNRC in communities throughout the state. These workshops are attended by dam owners, sheriffs, and various emergency-response people. The department normally puts on one or two of these workshops each year.

For more information regarding the Dam Safety Program, contact the Dam Safety Section of DNRC at 444-6601.

Amendments to the Disaster Relief Act of 1974

Congress recently amended the Disaster Relief Act of 1974 (Public Law 93-288). The Robert Stafford Disaster Relief and Emergency Assistance Act was signed into law by President Reagan on November 23, 1988. This bill will have an impact on communities affected by a flood disaster.

The Stafford Act encourages mitigation of natural hazards by providing:

1. money to states for ongoing hazard mitigation planning;
2. up to 10 percent of federal disaster assistance on a 50/50, federal/state cost-share basis for cost-effective mitigation measures;
3. mitigation assistance from the Department of Defense following a disaster declaration; and
4. a standard cost-share ratio of 75 percent federal to 25 percent state and local responsibility for disaster recovery repairs. This cost-share figure is now set by legislation and will not change without congressional action.

FEMA is required to issue regulations for the new amendments within 180 days of the act becoming law. The new regulations

should be out by June 1989.

There will no longer be a "first bite free" provision for publicly-owned buildings and contents that are not covered by flood insurance. This means that a building and its contents located in an identified flood-hazard area must be protected by flood insurance for the full value in order to qualify for disaster assistance. Before the Stafford Act, state and local governments have not been penalized for failing to insure their buildings and contents located within the 100-year floodplain prior to a flood disaster.

We do not know at this time if this act will deny federal disaster assistance to cities and counties not participating in the National Flood Insurance Program. However, legislation passed in the 1987 Montana Legislature denies any state assistance to cities and counties that have flood-hazard areas identified, but that have no floodplain management ordinances. This will deny any assistance from the Governor's Disaster Fund and will effectively deny at least a portion of potential federal assistance following a flood disaster. Now is a good time for those

communities to implement a floodplain management program. Affected communities include:

- Ekalaka
- Forsythe
- Garfield County
- Glendive
- Jordan
- Mineral County
- Musselshell County
- Neihart
- Polson
- Powder River County
- Prairie County
- Roosevelt County
- Rosebud County
- Sanders County
- Shelby
- Sheridan
- Sunburst
- Whitehall

Please contact DNRC's Floodplain Management Section at 444-6646 for assistance in meeting the requirements of the NFIP to ensure your eligibility for flood insurance and disaster assistance.

Administrative Rules— upcoming changes will affect floodplain management

DNRC is in the process of preparing proposed amendments to the Administrative Rules for floodplain management, ARM 36.15.101 through 36.15.902. The Floodplain and Floodway Management Act gave authority to the Board of Natural Resources and Conservation to adopt rules to implement the act. The current rules have seen few changes since they were originally adopted in the 1970s. Amendments will bring them up to date with current practice and more into line with NFIP requirements.

Anticipated changes will address mobile home floodproofing, individual sewage disposal systems, amendments to flood-hazard maps, storage or disposal of

solid and hazardous wastes, and notification to interested parties (including DNRC) of permit applications. Proposed amendments to the Administrative Rules will be sent to the Governor's Office for review in accordance with a recent directive issued by Governor Stephens. After clearance is received from the governor, proposed changes will be published in the Administrative Register for formal comment. DNRC must then respond to the formal comments. The final step in this process is formal approval by the Board of Natural Resources and Conservation.

DNRC is very interested in receiving comments from local floodplain administrators. Some of these proposed rules will have a definite impact on the implementation of local regulations.

Contact DNRC's Floodplain Management Section at 444-6646 for more information on the proposed rule changes.

New NFIP insurance servicing agent

The Denver office of Computer Services Corporation (CSC) has been closed to cut NFIP expenditures. CSC is the servicing contractor for the NFIP that provides flood insurance assistance to insurance agents and lenders. Montana is now served by the CSC Chicago-area office. The new contact

is: Peter Yarnot
800 Roosevelt Road
Building B, Suite 418
Glen Ellyn, Illinois 60137
Phone: (312) 790-9680

Insurance agents and lenders will be contacted by the Chicago CSC office when workshops are scheduled in Montana.

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